

Notice of Allowability	Application No.	Applicant(s)	
	09/777,506	LOTSPIECH ET AL.	
	Examiner	Art Unit	
	Longbit Chai	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview on 09/14/2004.
2. ☒ The allowed claim(s) is/are 1-3,5-12,14-21 and 23-27.
3. ☒ The drawings filed on 02/05/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>09/20/2004</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


 AYAZ SHEIKH
 SUPERVISORY PATENT EXAMINER
 TECHNOLOGY CENTER 2100

DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Rogitz on 09/14/2004.

The application has been amended as follows:

1. Please replace claim 1 with the following:
2. A method for defining sets of encryption keys from a key matrix, comprising:
receiving at least one parameter representing a characteristic of the key matrix; using the parameter and an error-correcting code, defining plural sets of keys; and assigning at least some sets of keys to at least some respective devices, wherein the receiving act includes receiving at least a row parameter "N" representing the number of rows in the key matrix and a column parameter "n" representing the number of columns in the key matrix, and the method further includes: using an error-correcting code having a Hamming distance "d" that minimizes key overlap between sets of keys.
3. Please cancel claim 4.
4. Please replace claim 5 with the following:

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5. The method of claim 1, wherein the error-correcting code defines the sets of keys using a total predefined number "T" of sets.

6. Please cancel claim 13.

7. Please replace claim 18 with the following:

8. A computer programmed with instructions to cause the computer to execute method acts including: receiving, as input, at least a number "n" representing a number of columns in a key matrix and a number "N" representing a number of rows in the key matrix, each position in the key matrix being definable by a respective index, each index being associated with a respective key useful by a decryption device for decrypting encrypted content; defining, based at least in part on the input, plural sets of keys using a non-random function, wherein the error-correcting code is associated with a generating matrix G, and the method executed by the computer further comprises storing the generating matrix G and an index of a stored set of keys, whereby no set of keys other than the index of the stored set of keys need be stored in that sets of keys can be regenerated using the generating matrix G and the index of the stored set.

9. Please cancel claim 22.

10. Please replace claim 25 with the following:

11. The method of claim 1, wherein the error-correcting code is a linear code.

Priority

12. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

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13. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

14. Therefore, the effective filing date for the subject matter defined in all of the claims in this application is 02/05/2001 because the claimed beneficial priority date on 08/23/1999 is not granted.

Allowable Subject Matter

15. Claims 1 – 3, 5 – 12, 14 – 21, and 23 – 27 are allowed.

16. The following is an examiner's statement of reasons for allowance:

17. The closest cited prior art (U.S. Patent No. US 2003/0223579 A1) fails to teach or suggest the features of defining a plural sets of encryption keys based on error-correcting code for efficient key storage purpose so that a plural sets of keys can be regenerated solely from (a) the index of the stored set of keys and (b) the characteristic generating matrix, and using the hamming distance d to minimize the overlaps between multiple sets of keys in view of the addition limitations recited by independent claims 1, 9 and 18 because prior-art only defines public keys based on error-correcting code in such a way that the code received can still be recovered from the errors that occur due

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to the public key corruptions even though all the operations required for encryption are performed by the corrupted public key.

18. Claims 2 – 3, 5 – 8, 10 – 12, 14 – 17, 19 – 21 and 23 – 27 would also be allowable for the reasons stated above

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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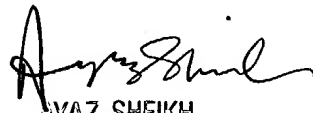
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 703-305-0710. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai
Examiner
Art Unit 2131

LBC


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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